MASSACHUSETTS
100 Fifth Avenue, 5th Floor
Waltham, Massachusetts 02451
p 781.419.7696

RHODE ISLAND
401 Wampanoag Trail, Suite 400
East Providence, Rhode Island 02915
p 401.434.5560

VIRGINIA
4410 E. Claiborne Square, Suite 334
Hampton, Virginia 23666
p 757.251.3790

January 28, 2014

Attachment 1

Air Compliance Clerk
U.S. EPA New England
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912

Re: Outer Continental Shelf Air Permit Semiannual Report
Cape Wind Energy Project – EPA Permit Number OCS-R1-01
Reporting Period: July 1, 2013 –December 31, 2013

Dear Sir/Madam:

On behalf of Cape Wind Associates, LLC (Cape Wind), ESS Group Inc. (ESS) is submitting this Semiannual Report to satisfy the reporting requirement of the Outer Continental Shelf (OCS) Air Permit (EPA Permit Number OCS-R1-01) issued by the United States Environmental Protection Agency (USEPA) for the Cape Wind Energy Project (the Project). This fourth Semiannual Report for the Project is for the reporting period from July 1, 2013 through December 31, 2013.

Section IX(c) of the OCS Air Permit requires the owner/operator to submit to EPA New England semiannual reports postmarked by January 30th and July 30th of each year. Each semiannual report must contain the information of all records required under Section VIII of the Permit, and records of all emission limit or other permit condition violations, all equipment failures or malfunctions, and all corrective actions.

September 11, 2012 was the date of the first OCS Attachment for the Project, and was therefore the Phase 1 Start Date, as defined by the Permit. The Project Area is defined in the Permit as the area within 25 miles of the Wind Turbine Generators (WTGs) as shown in Figure 1-1 of the December 17, 2008 application. The attached Engine Summary and Engine Operations & Emissions Summary summarize the recordkeeping information required by the Permit for each engine used within the Project Area since the Phase 1 Start Date. The Engine Summary includes the specific records required by the OCS Air Permit for each Project engine used within the Project Area since the Phase 1 Start Date. The Engine Operations & Emissions Summary summarizes the monthly, 12-month rolling, and Phase 1 total hours of operation and nitrogen oxides (NO_X) emissions from each Project OCS Stationary Engine, Non-Stationary Engine, and Vessel Engine used within the Project Area since the Phase 1 Start Date.

As shown on the attached, there was no Project engine use or NO_X emissions within the Project Area during this reporting period. There were also no Project OCS Attachments or OCS Detachments during this reporting period. The have been no NO_X emissions from the Project subject to the OCS Air Permit during the last 12-month rolling period. There were no OCS Air Permit condition violations reported for the Project during this reporting period.

With this submittal, Cape Wind has satisfied the reporting requirements of its OCS Air Permit for the reporting period from July 1, 2013 through December 31, 2013. The next Semiannual Report for the Project, to be postmarked for submittal to EPA New England by July 30, 2014, will report on all Project activities subject to the OCS Air Permit occurring between January 1, 2014 and June 30, 2014. Feel free to contact me by phone at (781) 419-7749 or via e-mail at mfeinblatt@essgroup.com if you have any questions regarding this OCS Air Permit Semiannual Report for the Cape Wind Energy Project.

Sincerely,

ESS GROUP, INC.

Michael E. Feinblatt
Practice Leader, Energy & Industrial Services

Attachments

C: Rachel Pachter, Cape Wind

Cape Wind Energy Project
Outer Continental Shelf Air Permit OCS-R1-01
Semiannual Emissions Report - Engine Summary
Reporting Period: July 1, 2013 - December 31, 2013 *

Phase 1 Start Date: 09/11/12
Phase 1 End Date:
Phase 2 Start Date:

OCS Stationary Engine Summary - Project Engines used as of the end of this Reporting Period

Operation	Vessel	Vessel Type	Engine	Project Use	Make	Model	Initial Use	Manufacture	Rated kW	Fuel	Sulfur	EPA Cert.	Maintenance	Failures	Malfunctions	Corrective Actions
Deep CPT/Boring	Skate3D	Jackup Barge	Power Pack	Jacking and Drilling	Perkins	1106D-E66TA	09/11/12	03/07/08	175	Diesel	9E-04	Tier 3	None reported	None reported	None reported	None reported
Deep CPT/Boring	Skate3D	Jackup Barge	Generator	Generator	Perkins	404D-22G	09/11/12	01/01/11	20	Diesel	9E-04	Tier 4	None reported	None reported	None reported	None reported

Other Project Engines Summary - Project Engines used as of the end of this Reporting Period

Operation	Vessel	Vessel Type	Engine	Project Use	Make	Model	Initial Use	Manufacture	Rated kW	Fuel	Sulfur	EPA Cert.	Maintenance	Failures	Malfunctions	Corrective Actions
Deep CPT/Boring	Skate3D	Jackup Barge	Thruster Pack	Propulsion	NR	NR	NR	NR	147	Diesel	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	OysterII	Safety Boat	Port Twin Yamaha	Propulsion	NR	NR	NR	NR	116	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	OysterII	Safety Boat	Stbd Twin Yamaha	Propulsion	NR	NR	NR	NR	116	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Taku	Crew Boat	Port Motor	Propulsion	NR	NR	NR	NR	168	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Taku	Crew Boat	Stbd Motor	Propulsion	NR	NR	NR	NR	168	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Taku	Crew Boat	Generator	Generator	NR	NR	NR	NR	8	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Puma	Tug	Port Main Engine	Propulsion	NR	NR	NR	NR	727	Diesel	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Puma	Tug	Stbd Main Engine	Propulsion	NR	NR	NR	NR	727	Diesel	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Puma	Tug	Port Generator	Generator	NR	NR	NR	NR	155	Diesel	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Puma	Tug	Stbd Generator	Generator	NR	NR	NR	NR	155	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Megan	Tug	Port Main	Propulsion	NR	NR	NR	NR	895	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Megan	Tug	Stbd Main	Propulsion	NR	NR	NR	NR	895	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Megan	Tug	Port Generator	Generator	NR	NR	NR	NR	80	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Megan	Tug	Stbd Generator	Generator	NR	NR	NR	NR	80	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	B. Light Tower	Bow Lighting	NR	NR	NR	NR	13	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	S. Light Tower	Stern Lighting	NR	NR	NR	NR	13	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	B. Generator	Generator	NR	NR	NR	NR	118	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	S. Generator	Generator	NR	NR	NR	NR	118	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	Crane	Lifting Spuds	NR	NR	NR	NR	270	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Hunter	Crew Boat	Stbd Engine	Propulsion	NR	NR	NR	NR	395	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Hunter	Crew Boat	Generator	Generator	NR	NR	NR	NR	40	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Hunter	Crew Boat	Port Main	Propulsion	NR	NR	NR	NR	395	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	ShTug	Tug	Aluminum A-2685	Propulsion	NR	NR	NR	NR	112	Gasoline	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	ShTug	Tug	Aluminum A-2685	Propulsion	NR	NR	NR	NR	112	Gasoline	NR	NR	NR	None reported	None reported	None reported

NR - Record not required by the OCS Air Permit

* No Project OCS Stationary Engines or Other Project Engines were used during this Reporting Period. All Project engine use was prior to this reporting period and reported during previous Semiannual Reports.

Cape Wind Energy Project
Outer Continental Shelf Air Permit OCS-R1-01
Semiannual Emissions Report - Engine Operations & Emissions Summary
Reporting Period: July 1, 2013 - December 31, 2013

OCS Source Emissions

		Prior to January 2013		Jan - Jun 2013		Jul 2013		Aug 2013		Sep 2013		Oct 2013		Nov 2013		Dec 2013		Jul - Dec 2013		Jan - Dec 2013		Phase 1 Total	
Vessel	Engine	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)
Skate3D	Power Pack	836.4	1290.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	836.4	1,290.7
Skate3D	Generator	1193.3	394.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,193.3	394.6
Total (lbs):			1,685.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	0.0	0.0		1,685.3
Total (tons):			0.84		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	0.00	0.00		0.84

Non-Stationary & Vessel Engine Emissions

		Prior to January 2013		Jan - Jun 2013		Jul 2013		Aug 2013		Sep 2013		Oct 2013		Nov 2013		Dec 2013		Jul - Dec 2013		Jan - Dec 2013		Phase 1 Total	
Vessel	Engine	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)
Skate3D	Thruster Pack	116.7	499.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	116.7	499.2
OysterII	Port Twin Yamaha	110.9	63.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	110.9	63.0
OysterII	Stbd Twin Yamaha	109.8	62.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	109.8	62.4
Taku	Port Motor	184.8	273.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	184.8	273.8
Taku	Stbd Motor	183.2	271.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	183.2	271.4
Taku	Generator	9.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	0.9
Puma	Port Main Engine	14.4	304.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4	304.6
Puma	Stbd Main Engine	14.1	298.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1	298.3
Puma	Port Generator	7.0	31.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	31.6
Puma	Stbd Generator	31.1	140.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.1	140.3
Megan	Port Main	275.5	3393.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	275.5	3,393.4
Megan	Stbd Main	209.5	2580.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	209.5	2,580.5
Megan	Port Generator	722.2	840.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	722.2	840.7
Megan	Stbd Generator	547.9	637.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	547.9	637.8
JMC141	B. Light Tower	245.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	245.0	51.0
JMC141	S. Light Tower	231.0	48.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	231.0	48.1
JMC141	B. Generator	324.0	337.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	324.0	337.2
JMC141	S. Generator	81.0	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	84.3
JMC141	Crane	97.0	231.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0	231.0
Hunter	Stbd Engine	197.0	324.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	197.0	324.8
Hunter	Generator	473.0	312.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	473.0	312.9
Hunter	Port Main	229.0	377.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	229.0	377.6
ShTug	Aluminum A-2685	30.6	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6	14.3
ShTug	Aluminum A-2685	30.7	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.7	14.3
Total (lbs):			11,193.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		11,193.4
Total (tons):			5.60		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		5.60

Total Phase 1 Emissions

Total (lbs):			12,878.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		12,878.7
Total (tons):			6.44		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		6.44

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East Providence, Rhode Island 02915
p 401.434.5560

VIRGINIA
4410 E. Claiborne Square, Suite 334
Hampton, Virginia 23666
p 757.251.3790

Attachment 2

July 29, 2013

Air Compliance Clerk
U.S. EPA New England
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912

Re: Outer Continental Shelf Air Permit Semiannual Report
Cape Wind Energy Project – EPA Permit Number OCS-R1-01
Reporting Period: January 1, 2013 –June 30, 2013

Dear Sir/Madam:

On behalf of Cape Wind Associates, LLC (Cape Wind), ESS Group Inc. (ESS) is submitting this Semiannual Report to satisfy the reporting requirement of the Outer Continental Shelf (OCS) Air Permit (EPA Permit Number OCS-R1-01) issued by the United States Environmental Protection Agency (USEPA) for the Cape Wind Energy Project (the Project). This third Semiannual Report for the Project is for the reporting period from January 1, 2013 through June 30, 2013.

Section IX(c) of the OCS Air Permit requires the owner/operator to submit to EPA New England semiannual reports postmarked by January 30th and July 30th of each year. Each semiannual report must contain the information of all records required under Section VIII of the Permit, and records of all emission limit or other permit condition violations, all equipment failures or malfunctions, and all corrective actions.

September 11, 2012 was the date of the first OCS Attachment for the Project, and was therefore the Phase 1 Start Date, as defined by the Permit. The Project Area is defined in the Permit as the area within 25 miles of the Wind Turbine Generators (WTGs) as shown in Figure 1-1 of the December 17, 2008 application. The attached Engine Summary and Engine Operations & Emissions Summary summarize the recordkeeping information required by the Permit for each engine used within the Project Area since the Phase 1 Start Date. The Engine Summary includes the specific records required by the OCS Air Permit for each Project engine used within the Project Area since the Phase 1 Start Date. The Engine Operations & Emissions Summary summarizes the monthly, 12-month rolling, and Phase 1 total hours of operation and nitrogen oxides (NO_X) emissions from each Project OCS Stationary Engine, Non-Stationary Engine, and Vessel Engine used within the Project Area since the Phase 1 Start Date.

As shown on the attached, there was no Project engine use or NO_X emissions within the Project Area during this reporting period. There were also no Project OCS Attachments or OCS Detachments during this reporting period. The total NO_X emissions from the Project subject to the OCS Air Permit during the last 12-month rolling period and during Phase 1 to date have been approximately 6.44 tons. There were no OCS Air Permit condition violations reported for the Project during this reporting period.

With this submittal, Cape Wind has satisfied the reporting requirements of its OCS Air Permit for the reporting period from January 1, 2013 through June 30, 2013. The next Semiannual Report for the Project, to be postmarked for submittal to EPA New England by January 30, 2014, will report on all Project activities subject to the OCS Air Permit occurring between July 1, 2013 and December 31, 2013. Feel free to contact me by phone at (781) 419-7749 or via e-mail at mfeinblatt@essgroup.com if you have any questions regarding this OCS Air Permit Semiannual Report for the Cape Wind Energy Project.

Sincerely,

ESS GROUP, INC.

Michael E. Feinblatt
Practice Leader, Energy & Industrial Services

Attachments

C: Rachel Pachter, Cape Wind

Cape Wind Energy Project
Outer Continental Shelf Air Permit OCS-R1-01
Semiannual Emissions Report - Engine Summary
Reporting Period: January 1, 2013 - June 30, 2013 *

Phase 1 Start Date: 09/11/12
Phase 1 End Date:
Phase 2 Start Date:

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Operation	Vessel	Vessel Type	Engine	Project Use	Make	Model	Initial Use	Manufacture	Rated kW	Fuel	Sulfur	EPA Cert.	Maintenance	Failures	Malfunctions	Corrective Actions
Deep CPT/Boring	Skate3D	Jackup Barge	Power Pack	Jacking and Drilling	Perkins	1106D-E66TA	09/11/12	03/07/08	175	Diesel	0.00092	Tier 3	None reported	None reported	None reported	None reported
Deep CPT/Boring	Skate3D	Jackup Barge	Generator	Generator	Perkins	404D-22G	09/11/12	01/01/11	20	Diesel	0.00092	Tier 4	None reported	None reported	None reported	None reported

Other Project Engines Summary - Project Engines used as of the end of this Reporting Period

Operation	Vessel	Vessel Type	Engine	Project Use	Make	Model	Initial Use	Manufacture	Rated kW	Fuel	Sulfur	EPA Cert.	Maintenance	Failures	Malfunctions	Corrective Actions
Deep CPT/Boring	Skate3D	Jackup Barge	Thruster Pack	Propulsion	NR	NR	NR	NR	147	Diesel	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	OysterII	Safety Boat	Port Twin Yamaha	Propulsion	NR	NR	NR	NR	116	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	OysterII	Safety Boat	Stbd Twin Yamaha	Propulsion	NR	NR	NR	NR	116	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Taku	Crew Boat	Port Motor	Propulsion	NR	NR	NR	NR	168	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Taku	Crew Boat	Stbd Motor	Propulsion	NR	NR	NR	NR	168	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Taku	Crew Boat	Generator	Generator	NR	NR	NR	NR	8	Gasoline	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Puma	Tug	Port Main Engine	Propulsion	NR	NR	NR	NR	727	Diesel	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Puma	Tug	Stbd Main Engine	Propulsion	NR	NR	NR	NR	727	Diesel	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Puma	Tug	Port Generator	Generator	NR	NR	NR	NR	155	Diesel	NR	NR	NR	None reported	None reported	None reported
Deep CPT/Boring	Puma	Tug	Stbd Generator	Generator	NR	NR	NR	NR	155	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Megan	Tug	Port Main	Propulsion	NR	NR	NR	NR	895	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Megan	Tug	Stbd Main	Propulsion	NR	NR	NR	NR	895	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Megan	Tug	Port Generator	Generator	NR	NR	NR	NR	80	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Megan	Tug	Stbd Generator	Generator	NR	NR	NR	NR	80	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	B. Light Tower	Bow Lighting	NR	NR	NR	NR	13	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	S. Light Tower	Stern Lighting	NR	NR	NR	NR	13	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	B. Generator	Generator	NR	NR	NR	NR	118	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	S. Generator	Generator	NR	NR	NR	NR	118	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	JMC141	Spud Barge	Crane	Lifting Spuds	NR	NR	NR	NR	270	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Hunter	Crew Boat	Stbd Engine	Propulsion	NR	NR	NR	NR	395	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Hunter	Crew Boat	Generator	Generator	NR	NR	NR	NR	40	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed & Deep CPT/Boring	Hunter	Crew Boat	Port Main	Propulsion	NR	NR	NR	NR	395	Diesel	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	ShTug	Tug	Aluminum A-2685	Propulsion	NR	NR	NR	NR	112	Gasoline	NR	NR	NR	None reported	None reported	None reported
Seabed CPT	ShTug	Tug	Aluminum A-2685	Propulsion	NR	NR	NR	NR	112	Gasoline	NR	NR	NR	None reported	None reported	None reported

NR - Record not required by the OCS Air Permit

* No Project OCS Stationary Engines or Other Project Engines were used during this Reporting Period. All Project engine use was prior to this reporting period and reported during previous Semiannual Reports.

Cape Wind Energy Project
Outer Continental Shelf Air Permit OCS-R1-01
Semiannual Emissions Report - Engine Operations & Emissions Summary
Reporting Period: January 1, 2013 - June 30, 2013

OCS Source Emissions

		Prior to July 2012		July - Dec 2012		Jan 2013		Feb 2013		Mar 2013		Apr 2013		May 2013		June 2013		Jan - Jun 2013		July 2012 - June 2013		Phase 1 Total	
Vessel	Engine	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)
Skate3D	Power Pack	0.0	0.0	836.4	1290.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	836.4	1,290.7	836.4	1,290.7
Skate3D	Generator	0.0	0.0	1193.3	394.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,193.3	394.6	1,193.3	394.6
Total (lbs):			0.0		1685.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1,685.3		1,685.3
Total (tons):			0.00		0.84265		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.84		0.84

Non-Stationary & Vessel Engine Emissions

		Prior to July 2012		July - Dec 2012		Jan 2013		Feb 2013		Mar 2013		Apr 2013		May 2013		June 2013		Jan - Jun 2013		July 2012 - June 2013		Phase 1 Total	
Vessel	Engine	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)	Hours	NOx (lbs)
Skate3D	Thruster Pack	0.0	0.0	116.7	499.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	116.7	499.2	116.7	499.2
OysterII	Port Twin Yamaha	0.0	0.0	110.9	63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	110.9	63.0	110.9	63.0
OysterII	Stbd Twin Yamaha	0.0	0.0	109.8	62.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	109.8	62.4	109.8	62.4
Taku	Port Motor	0.0	0.0	184.8	273.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	184.8	273.8	184.8	273.8
Taku	Stbd Motor	0.0	0.0	183.2	271.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	183.2	271.4	183.2	271.4
Taku	Generator	0.0	0.0	9.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	0.9	9.9	0.9
Puma	Port Main Engine	0.0	0.0	14.4	304.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4	304.6	14.4	304.6
Puma	Stbd Main Engine	0.0	0.0	14.1	298.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1	298.3	14.1	298.3
Puma	Port Generator	0.0	0.0	7	31.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	31.6	7.0	31.6
Puma	Stbd Generator	0.0	0.0	31.1	140.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.1	140.3	31.1	140.3
Megan	Port Main	0.0	0.0	275.5	3393.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	275.5	3,393.4	275.5	3,393.4
Megan	Stbd Main	0.0	0.0	209.5	2580.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	209.5	2,580.5	209.5	2,580.5
Megan	Port Generator	0.0	0.0	722.2	840.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	722.2	840.7	722.2	840.7
Megan	Stbd Generator	0.0	0.0	547.9	637.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	547.9	637.8	547.9	637.8
JMC141	B. Light Tower	0.0	0.0	245	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	245.0	51.0	245.0	51.0
JMC141	S. Light Tower	0.0	0.0	231	48.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	231.0	48.1	231.0	48.1
JMC141	B. Generator	0.0	0.0	324	337.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	324.0	337.2	324.0	337.2
JMC141	S. Generator	0.0	0.0	81	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	84.3	81.0	84.3
JMC141	Crane	0.0	0.0	97	231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0	231.0	97.0	231.0
Hunter	Stbd Engine	0.0	0.0	197	324.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	197.0	324.8	197.0	324.8
Hunter	Generator	0.0	0.0	473	312.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	473.0	312.9	473.0	312.9
Hunter	Port Main	0.0	0.0	229	377.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	229.0	377.6	229.0	377.6
ShTug	Aluminum A-2685	0.0	0.0	30.6	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6	14.3	30.6	14.3
ShTug	Aluminum A-2685	0.0	0.0	30.7	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.7	14.3	30.7	14.3
Total (lbs):			0.0		11,193.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0		11,193.4		11,193.4
Total (tons):			0.00		5.60		0.00		0.00		0.00		0.00		0.00		0.00		0.00		5.60		5.60

Total Phase 1 Emissions

Total (lbs):			0.0		12,878.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		12,878.7		12,878.7
Total (tons):			0.00		6.44		0.00		0.00		0.00		0.00		0.00		0.00		0.00		6.44		6.44